

What is claimed is:

- 1        1.        A circuit comprising:  
2                a first driver to receive a first signal from a first input port;  
3                a second driver to receive a time-delayed version of the first signal from a second  
4        input port; and  
5                a transformer coupled to the first driver and the second driver, the transformer to  
6        provide an output signal to an output port.
- 1        2.        The circuit of claim 1, further comprising a capacitive load coupled to the  
2        transformer.
- 1        3.        The circuit of claim 2, wherein the transformer has a leakage inductance and the  
2        capacitive load has a capacitance, and the time-delayed version of the first signal is time-  
3        delayed with respect to the first signal by a time about equal to a product of  $\pi$  and a  
4        square-root of a product of the leakage inductance and the capacitance.
- 1        4.        The circuit of claim 1, further comprising an inductor coupled to the transformer  
2        and a transistor coupled to the inductor.
- 1        5.        The circuit of claim 4, wherein the inductor has an inductance and the transistor  
2        has a capacitance and the time-delayed version of the first signal is time-delayed with  
3        respect to the first signal by a time about equal to a product of  $\pi$  and a square-root of a  
4        product of the inductance and the capacitance.
- 1        6.        The circuit of claim 1, further comprising a Schmitt trigger circuit to couple the  
2        output port to the second input port.

- 1        7.        The circuit of claim 6, wherein the Schmitt trigger circuit includes a hysteresis  
2        value about equal to a supply potential.
- 1        8.        The circuit of claim 7, further comprising a clamp circuit coupled to the output  
2        port, the clamp circuit to hold the output port at the supply potential.
- 1        9.        An apparatus comprising:  
2                a plurality of circuits, each of the plurality of circuits including a plurality of  
3        drivers coupled to a first transformer circuit, wherein the first transformer circuit in each  
4        of the plurality of circuits is coupled to a second transformer circuit including a center-tap  
5        and each of the plurality of drivers in each of the plurality of driver circuits is coupled to  
6        a separate input port.
- 1        10.       The apparatus of claim 9, wherein the first transformer circuit in at least one of  
2        the plurality of driver circuits comprises a loosely coupled transformer.
- 1        11.       The apparatus of claim 10, further comprising a capacitive load coupled to the  
2        center- tap.
- 1        12.       The apparatus of claim 11, wherein the capacitive load comprises a  
2        complementary metal-oxide field-effect transistor.
- 1        13.       The apparatus of claim 9, wherein the second transformer comprises an auto-  
2        transformer.
- 1        14.       An apparatus comprising:  
2                a communication circuit formed on a substrate; and  
3                a power supply circuit formed on the die to provide power to the communication  
4        circuit, the power supply circuit including:  
5                a first driver coupled to an input port;  
6                a delay circuit coupled to the input port;

7                   a second driver coupled to the delay circuit; and  
8                   an auto-transformer coupled to the first driver, to the second driver, and to  
9                   an output port, the output port being coupled to a capacitive load and the  
10                  capacitive load being coupled to the communication circuit to provide power to  
11                  the communication circuit.

1       15.     The apparatus of claim 14, wherein the communication circuit comprises a .  
2       communication base station.

1       16.     The apparatus of claim 15, wherein the transformer includes a leakage inductance,  
2       the capacitive load includes a capacitance, and the delay circuit includes a delay about  
3       equal to a product of  $\pi$  and the square-root of a product of the leakage inductance and the  
4       capacitance.

1       17.     The apparatus of claim 16, wherein the processor comprises a reduced instruction  
2       set processor.

1       18.     The apparatus of claim 14, further comprising a processor coupled to the  
2       communication circuit.

1       19.     The apparatus of claim 18, wherein the processor comprises a very-long  
2       instruction word processor.

1       20.     A method comprising:  
2               receiving a first input signal;  
3               receiving a second input signal, the second input signal being a time-delayed  
4       version of the first input signal; and  
5               processing the first input signal and the second input signal to generate a half-  
6       raised cosine signal.

- 1      21.    The method of claim 20, wherein receiving the first input signal comprises  
2      receiving a digital signal.
- 1      22.    The method of claim 21, wherein receiving the second input signal comprises  
2      receiving a digital signal.
- 1      23.    The method of claim 22, wherein processing the first input signal and the second  
2      input signal comprises providing a signal path including a first driver, an inductor, and a  
3      capacitive load for the first input signal and a signal path including a second driver, the  
4      inductor, and the capacitive load for the second input signal.
- 1      24.    The method of claim 20, wherein receiving the first input signal comprises  
2      receiving a low-to-high transition signal.